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| LEE, CHUN KUAN | |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/688,273 | MYLLY ET AL. | |
| | Examiner | Art Unit | |
| | Chun-Kuan Lee | 2181 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *03 July 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1,5-7,11-13,15-19,32 and 38-44* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,5-7,11-13,15-19,32 and 38-44* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *17 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

## RESPONSE TO ARGUMENTS

1. Applicant's arguments with respect to claims 1, 5-7, 11-13, 15-19, 32 and 38-44 have been considered but are moot in view of the new ground(s) of rejection. Currently claims 2-4, 8-10, 14, 20-31 and 33-37 are canceled, and claims 1, 5-7, 11-13, 15-19, 32 and 38-44 are pending for examination.

## I. REJECTIONS BASED ON 35 U.S.C. 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1, 5-7, 11-12, 16, 32, 38-39, 41 and 43-44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claim 1, in line 3-4, it is not fully clear if "the device" is referring to the previously recited auxiliary device or not; the examiner will assume the claim limitation of "... use by a device connectable to a terminal ..." for the current examination.

As per claim 7, in line 6, it is not fully clear if "the device" is referring to the previously recited auxiliary device or not; the examiner will assume the claim limitation of "... a device connectable to the terminal ... wherein the device comprises ..." for the current examination.

As per claim 16, in lines 11 and 15-18, it is not fully clear if "the card" is referring to the previously recited memory card or not; the examiner will assume the claim limitation of "... the memory card ..." for the current examination.

As per claim 32, in line 2, it is not fully clear if "the device" is referring to the previously recited auxiliary device or not; the examiner will assume the claim limitation of "... a device for changing mode ..." for the current examination.

As per claim 43, in lines 1-2, it is not fully clear as to which "device" the applicant is referring to; the examiner will assume the claim limitation of "... changing the mode of the device from the dormant mode..." for the current examination.

As per claim 5-6, 11-12, 38-39, 41 and 44, dependent claims 5-6, 11-12, 38-39, 41 and 44 are also rejected at least due to direct/indirect dependency on the rejected claims 1, 7 and 43.

## II. REJECTIONS BASED ON PRIOR ART

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 7, 11, 13, 15-19, 32 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oh-Yang et al. (US Patent 6,351,820) in view of Khouli et al. (US Patent 6,308,278) and Micalizzi, Jr. et al. (US Patent 6,434,630).

4. As per claim 1, Oh-Yang teaches a method for used by an device connectable to a terminal comprising:

receiving a command from the terminal (Fig. 1, ref. 80) for changing mode of the device (Fig. 1, ref. 10) from a dormant mode (e.g. sleep state) to a normal mode (e.g. normal state) via a command line of the interface (col. 2, ll. 26-30; col. 3, ll. 54-59 and col. 5, l. 66 to col. 6, l. 3) wherein the line utilized for the transferring the corresponding command is the command line; and

changing the mode of the device (Fig. 1,ref. 10) from the dormant mode to the normal mode in response to the command (col. 2, ll. 26-30; col. 3, ll. 54-59 and col. 5, l. 66 to col. 6, l. 3),

the device utilized by the terminal after the mode change (col. 2, ll. 26-30; col. 3, ll. 54-59 and col. 5, l. 66 to col. 6, l. 3);

wherein said command is used for changing the mode of the device from the dormant mode to the normal mode or from the normal mode to the dormant mode, said command comprises at least one bit, said one bit indicates whether the mode change is from the dormant mode to the normal mode or from the normal mode to the dormant mode (col. 5, ll.15-19; col. 5, ll. 39-43 and col. 5, l. 66 to col. 6, l. 3), as the shift to sleep state command comprising the corresponding bits of command data must differ from the

shift to normal command comprising the correspond bits of command data in order to properly distinguish and indicate the command for setting the sleep state flag, and

wherein the mode change in the device includes the device is in a first state after the command has been received in the device (e.g. just received the command, before processing the command) and the device is in a second state after the normal mode is in use in the device (e.g. after processing the command and operating in normal state) (col. 2, ll. 26-30 and col. 5, l. 66 to col. 6, l. 3).

Oh-Yang does not teach the method comprising:

transmitting to the terminal an indication ... so that the device can be used by the terminal immediately; and

the indication of mode change is transmitted in such a manner that a state of the data line is set in a first logical state after the command has been received and the state of the data line is set in a second logical state after the normal mode is in use.

Micalizzi teaches a system and a method comprising transmitting to a terminal (e.g. host) an indication (e.g. interrupt) of a completion of a terminal request by a device such that the terminal can immediately proceed to a step following the interrupt as other operations are suspended and the interrupt is serviced (col. 1, ll. 14-41).

Khouli teaches a system and a method comprising:

transmitting to the terminal (Fig. 2, ref. 212) an indication (e.g. wake signals from LAN controller) of indicating the mode change (e.g. between active mode and standby mode) via a data line so that device can be used by the terminal immediately (Fig. 2, ref. 240) (Fig. 2-3 and col. 6, ll. 1-25), in combination with Micalizzi's above teaching, by

immediate servicing the received interrupt indicating the device is awake, the terminal can immediately utilize the device; and

the indication of mode change is transmitted in such a manner that a state of the data line (Fig. 2, ref. 240) is set in a first logical state before transferring of the indication (e.g. after the command has been received, before processing of the command) and the state of the data line is set in a second logical state after the normal mode (e.g. active mode) is in use (e.g. after processing of the command and transferring the corresponding indication) (Fig. 2-3 and col. 6, ll. 1-25), as the transferring of the indication would require the change of logical stated in the data line in order to detect the indication.

It would have been obvious to one of ordinary skill in this art, at the time of invention was made to include Micalizzi's interrupt receiving and servicing and Khouli's data line and indication signal into Oh-Yang's method for the benefit of determining the command issued by the terminal is correctly executed (Micalizzi, col. 1, ll. 33-35) and enabling a robust power management system, wherein the whole computer system can reduce power consumption (Khouli, col. 2, ll. 1-11 and col. 2, ll. 28-35) to obtain the invention as specified in claim 1.

5. As per claim 7, Oh-Yang teaches a system, comprising:

a terminal (Fig. 1, ref. 80), and

a device (Fig. 1, ref. 10) connected to the terminal via an interface of the terminal (Fig. 1, ref. 80) wherein said terminal comprises:

an interface controller configure to transfer a command via a command line of the interface to the device, for changing mode of the device from a dormant mode (e.g. sleep state) to a normal mode (e.g. normal state) (col. 2, ll. 26-30; col. 3, ll. 54-59 and col. 5, l. 66 to col. 6, l. 3), wherein the computer (Fig. 1, ref. 80) would have the corresponding interface controller for the proper transferring of the command and the transferring of the command would require the correspond command line, and wherein the device comprises:

a controller (Fig. 1, ref. 20, 12) configured to receive the command and to set the mode of the device according to the command (col. 2, ll. 26-30 and col. 4, l. 3 to col. 6, l. 3);

changing the mode of the card in response to the command from the interface, and utilization of the device by the terminal after the mode change (col. 2, ll. 26-30; col. 3, ll. 54-59 and col. 4, l. 3 to col. 6, l. 3),

wherein said command is used for changing the mode of the device from the dormant mode to the normal mode or from the normal mode to the dormant mode, said command comprises at least one bit, said one bit indicates whether the mode change is from the dormant mode to the normal mode or from the normal mode to the dormant mode (col. 5, ll.15-19; col. 5, ll. 39-43 and col. 5, l. 66 to col. 6, l. 3), as the shift to sleep state command comprising the corresponding bits of command data must differ from the shift to normal command comprising the correspond bits of command data in order to properly distinguish and indicate the command for setting the sleep state flag, and

wherein the mode change in the device includes the device is in a first state after the command has been received in the device (e.g. just received the command, before processing the command) and the device is in a second state after the normal mode is in use in the device (e.g. after processing the command and operating in normal state) (col. 2, ll. 26-30 and col. 5, l. 66 to col. 6, l. 3).

Oh-Yang does not teach the system comprising:

a connector, configured to transmit to the terminal an indication ... via a data line so that the device can be use by the terminal immediately; and

the indication of mode change is transmitted in such a manner that a state of the data line is set in a first logical state after the command has been received and the state of the data line is set in a second logical state after the normal mode is in use.

Micalizzi teaches a system and a method comprising transmitting to a terminal (e.g. host) an indication (e.g. interrupt) of a completion of a terminal request by a device such that the terminal can immediately proceed to a step following the interrupt as other operations are suspended and the interrupt is serviced (col. 1, ll. 14-41).

Khouli teaches a system and a method comprising:

a connector, configured to transmit to a terminal (Fig. 2, ref. 212) an indication (e.g. wake signals from LAN controller) of mode change from a dormant mode (e.g. stand by mode) to a normal mode (e.g. active mode) via a data line (Fig. 2, ref. 240) so that the device can be use by the terminal immediately (Fig. 2-3 and col. 6, ll. 1-25), wherein the connection between the peripheral device and the terminal is accomplished via the connector; and in combination with Micalizzi's above teaching, by immediate

servicing the received interrupt indicating the device is awake, the terminal can immediately utilize the device; and

the indication of mode change is transmitted in such a manner that a state of the data line (Fig. 2, ref. 240) is set in a first logical state before transferring of the indication (e.g. after the command has been received, before processing of the command) and the state of the data line is set in a second logical state after the normal mode (e.g. active mode) is in use (e.g. after processing of the command and transferring the corresponding indication) (Fig. 2-3 and col. 6, ll. 1-25), as the transferring of the indication would require the change of logical stated in the data line in order to detect the indication.

It would have been obvious to one of ordinary skill in this art, at the time of invention was made to include Khouli's data line and indication signal into Oh-Yang's system for the benefit of determining the command issued by the terminal is correctly executed (Micalizzi, col. 1, ll. 33-35) and enabling a robust power management system, wherein the whole computer system can reduce power consumption (Khouli, col. 2, ll. 1-11 and col. 2, ll. 28-35) to obtain the invention as specified in claim 7.

6. As per claim 11, Oh-Yang, Micalizzi and Khouli teach all the limitation of claim 7 as discussed above, where Oh-Yang and Khouli further teach the system comprising wherein the interface comprises at least one device connection for connecting the device to the terminal (Oh-Yang, connection between ref. 18 and ref. 80 on Fig. 1), and said at least one device connection comprises at least the following lines:

one data line (Khouli, Fig. 3, ref. 310, 320) configured to the transfer data between the terminal and the device,

one command line configured to transmit commands from the terminal to the device and to transmit responses from the device to the terminal (Oh-Yang, col. 5, l. 66 to col. 6, l. 3 and Khouli, Fig. 3, ref. 236), as the command is transferred from the computer to the PC card, there must be the command line utilized for the transferring of the commands, and

one clock line (Khouli, Fig. 3, ref. 315, 325) configured to transmit a clock signal from the terminal to the device.

7. As per claims 13 and 16, Oh-Yang teaches a device (memory card), connectable to a terminal through an interface of the terminal, comprising:

a controller (Fig. 1, ref. 20, 12) configured to receive a command from the terminal (Fig. 1, ref. 80) for change mode of the device (memory card) from a dormant mode (e.g. sleep state) to a normal mode (e.g. normal state) via a command line of the interface (Fig. 1, ref. 80), and to change the mode of the device (memory card) from the dormant mode (e.g. sleep state) to the normal mode (e.g. normal state) in response to said command (col. 2, ll. 26-30; col. 3, ll. 54-59 and col. 4, l. 3 to col. 6, l. 3), wherein the line utilized for the transferring the corresponding command is the command line; and

wherein said command is used for changing the mode of the device (memory card) from the dormant mode to the normal mode or from the normal mode to the dormant mode, said command comprises at least one bit, said one bit indicates whether

the mode change is from the dormant mode to the normal mode or from the normal mode to the dormant mode (col. 5, ll.15-19; col. 5, ll. 39-43 and col. 5, l. 66 to col. 6, l. 3), as the shift to sleep state command comprising the corresponding bits of command data must differ from the shift to normal command comprising the correspond bits of command data in order to properly distinguish and indicate the command for setting the sleep state flag, and

wherein the mode change in the device (memory card) includes the device (memory card) is in a first state after the command has been received in the device (memory card) (e.g. just received the command, before processing the command) and the device (memory card) is in a second state after the normal mode is in use in the device (memory card) (e.g. after processing the command and operating in normal state) (col. 2, ll. 26-30 and col. 5, l. 66 to col. 6, l. 3).

Oh-Yang does not teach the card comprising:

a connector, configured to transmit to the terminal an indication … so that the device (memory card) can be used by the terminal immediately;

the indication of mode change is transmitted in such a manner that a state of the data line is set in a first logical state after the command has been received and the state of the data line is set in a second logical state after the normal mode is in use.

Micalizzi teaches a system and a method comprising transmitting to a terminal (e.g. host) an indication (e.g. interrupt) of a completion of a terminal request by a device such that the terminal can immediately proceed to a step following the interrupt as other operations are suspended and the interrupt is serviced (col. 1, ll. 14-41).

Khouli teaches a system and a method comprising:

a connector, configured to transmit to a terminal (Fig. 2, ref. 212) an indication (e.g. wake signals from LAN controller) of mode change (e.g. between active mode and stand by mode) via the data line of the interface so that the device (memory card) can be used by the terminal immediately (Fig. 2-3 and col. 6, ll. 1-25), wherein the connection between the peripheral device and the terminal is accomplished via the connector; and in combination with Micalizzi's above teaching, by immediate servicing the received interrupt indicating the device is awake, the terminal can immediately utilize the device; and

the indication of mode change is transmitted in such a manner that a state of the data line (Fig. 2, ref. 240) is set in a first logical state before transferring of the indication (e.g. after the command has been received, before processing of the command) and the state of the data line is set in a second logical state after the normal mode (e.g. active mode) is in use (e.g. after processing of the command and transferring the corresponding indication) (Fig. 2-3 and col. 6, ll. 1-25), as the transferring of the indication would require the change of logical stated in the data line in order to detect the indication.

It would have been obvious to one of ordinary skill in this art, at the time of invention was made to include Khouli's data line and indication signal into Oh-Yang's card for the benefit of determining the command issued by the terminal is correctly executed (Micalizzi, col. 1, ll. 33-35) and enabling a robust power management system,

wherein the whole computer system can reduce power consumption (Khouli, col. 2, ll. 1-11 and col. 2, ll. 28-35) to obtain the invention as specified in claims 13 and 16.

8. As per claim 15, Oh-Yang, Micalizzi and Khouli teach all the limitations of claim 13 as discussed above, where Oh-Yang and Khouli further teach the card comprising wherein the connector is a bus connection block (Oh-Yang, Fig. 1, ref. 18) for transferring said change of logical stated to the terminal on the data line (Khouli, Fig. 2, ref. 240) of the interface (Khouli, col. 4, ll. 7-9 and col. 6, ll. 12-14).

9. As per claims 17 and 19, Oh-Yang teaches a terminal (mobile station) comprising:

an interface (Fig. 1, ref. 80) configured to connect a card (Fig. 1, ref. 10) to the terminal (mobile station) (Fig. 1, ref. 80), said interface comprising one or more signal lines including a command line (col. 1, ll. 48-52; col. 2, ll. 26-30; col. 3, ll. 54-59 and col. 5, l. 66 to col. 6, l. 3), wherein the line utilized for the transferring the corresponding command is the command line;

an interface controller, configured to transfer a command via the command line of the interface to the card instructing the card to change mode of the card from a dormant mode (e.g. sleep state) to a normal mode (e.g. normal state) (col. 2, ll. 26-30; col. 3, ll. 54-59 and col. 5, l. 66 to col. 6, l. 3), wherein the computer (Fig. 1, ref. 80) would have the corresponding interface controller for the proper transferring of the command; and

changing the mode of the card in response to said command from the interface (col. 2, ll. 26-30 and col. 4, l. 3 to col. 6, l. 3),

wherein said command is used for changing the mode of the card from the dormant mode to the normal mode or from the normal mode to the dormant mode, said command comprises at least one bit, said bit indicates whether the mode change is from the dormant mode to the normal mode or from the normal mode to the dormant mode (col. 5, ll.15-19; col. 5, ll. 39-43 and col. 5, l. 66 to col. 6, l. 3), as the shift to sleep state command comprising the corresponding bits of command data must differ from the shift to normal command comprising the correspond bits of command data in order to properly distinguish and indicate the command for setting the sleep state flag, and

wherein the mode change in the card includes the card is in a first state after the command has been received in the card (e.g. just received the command, before processing the command) and the card is in a second state after the normal mode is in use in the card (e.g. after processing the command and operating in normal state) (col. 2, ll. 26-30 and col. 5, l. 66 to col. 6, l. 3).

Oh-Yang does not teach the system comprising:

a data line;

receiving from the card an indication ... ;

a processor configured to process said indication ... so that the terminal can start using the card immediately after receiving the indication; and

the indication of mode change is transmitted in such a manner that a state of the data line is set in a first logical state after the command has been received and the state of the data line is set in a second logical state after the normal mode is in use.

Micalizzi teaches a system and a method comprising receiving from a device by a terminal (e.g. host) an indication (e.g. interrupt); and a processor configured to process said indication so that the terminal can start a step following the interrupt immediately after receiving the indication, as other operations are suspended and the interrupt is serviced (col. 1, ll. 14-41).

Khouli teaches a system and a method comprising:

a data line (Fig. 2, ref. 240);

receiving from the peripheral device (card) an indication (e.g. wake signals from LAN controller) of mode change (e.g. between active mode and stand by mode) via the data line (Fig. 2, ref. 240) (Fig. 2-3 and col. 6, ll. 1-25);

a processor (Fig. 2, ref. 214) configured to process said indication of mode change so that a terminal can start using the peripheral device (e.g. card) immediately after receiving the indication (Fig. 2-3; col. 3, ll. 15-19 and col. 6, ll. 1-25), as in combination with Micalizzi's above teaching, by immediate servicing the received interrupt indicating the device is awake, the terminal can immediately utilize the device; and

the indication of mode change is transmitted in such a manner that a state of the data line (Fig. 2, ref. 240) is set in a first logical state before transferring of the indication (e.g. after the command has been received, before processing of the command) and the

state of the data line is set in a second logical state after the normal mode (e.g. active mode) is in use (e.g. after processing of the command and transferring the corresponding indication) (Fig. 2-3 and col. 6, ll. 1-25), as the transferring of the indication would require the change of logical stated in the data line in order to detect the indication.

It would have been obvious to one of ordinary skill in this art, at the time of invention was made to include Khouli's data line, processor and indication signal into Oh-Yang's system for the benefit of determining the command issued by the terminal is correctly executed (Micalizzi, col. 1, ll. 33-35) and enabling a robust power management system, wherein the whole computer system can reduce power consumption (Khouli, col. 2, ll. 1-11 and col. 2, ll. 28-35) to obtain the invention as specified in claims 17 and 19.

10. As per claim 18, Oh-Yang, Micalizzi and Khouli teach all the limitations of claim 17 as discussed above, where Oh-Yang and Khouli further teach the terminal comprising wherein the terminal comprises a bus connection block (Oh-Yang, Fig. 1, ref. 18, 80) for transferring the changes of logical stated from said data line (Khouli, Fig. 2, ref. 240) to said processor (Khouli, Fig. 2, ref. 214) (Khouli, col. 4, ll. 7-9 and col. 6, ll. 12-14).

11. As per claim 32, Oh-Yang teaches a method for use by a terminal (e.g. notebook personal computer) comprising:

transmitting a command to an device (Fig. 1, ref. 10) for changing mode of the device from a dormant mode (e.g. sleep state) to a normal mode (e.g. normal state), said device being connected to an interface of the terminal (Fig. 1, ref. 80) and said command being transmitted from the terminal to the device via a command line of the interface (col. 2, ll. 26-30; col. 3, ll. 54-59 and col. 5, l. 66 to col. 6, l. 3) wherein the line utilized for the transferring the corresponding command is the command line

shifting from the dormant mode (e.g. sleep state) to the normal mode (e.g. normal state) in response to the command (col. 2, ll. 22-30; col. 3, ll. 54-59 and col. 5, l. 66 to col. 6, l. 3); and

starting to use the device in a normal way in response to said card shifting to the normal mode (col. 2, ll. 22-30; col. 3, ll. 54-59 and col. 5, l. 66 to col. 6, l. 3), and

wherein the mode change in the card includes the device is in a first state after the command has been received in the device (e.g. just received the command, before processing the command) and the device is in a second state after the normal mode is in use in the device (e.g. after processing the command and operating in normal state) (col. 2, ll. 26-30 and col. 5, l. 66 to col. 6, l. 3).

Oh-Yang does not teach the system comprising:

receiving an indication ... from the device informing the terminal ... ;

start using the device ... immediately after receiving said indication;

the indication of mode change is transmitted in such a manner that a state of a data line is set in a first logical state after the command has been received and the state of the data line is set in a second logical state after the normal mode is in use.

Micalizzi teaches a system and a method comprising receiving an indication (e.g. interrupt) from a device by a terminal (e.g. host) informing the terminal that the device has complete a terminal command; and process said indication immediately after receiving said indication, as other operations are suspended and the interrupt is serviced (col. 1, ll. 14-41)

Khouli teaches a system and a method comprising:

receiving an indication (e.g. wake signals from LAN controller) of mode change (e.g. between active mode and stand by mode) from a device informing a terminal (Fig. 2, ref. 234) that the device has shifted to the normal mode (e.g. active mode) (Fig. 2-3 and col. 6, ll. 1-25);

start using the device in a normal way immediately after receiving said indication (Fig. 2-3 and col. 6, ll. 1-25), as in combination with Micalizzi's above teaching, by immediate servicing the received interrupt indicating the device is awake, the terminal can immediately utilize the device;

the indication of mode change is transmitted in such a manner that a state of a data line (Fig. 2, ref. 240) is set in a first logical state before transferring of the indication (e.g. after the command has been received, before processing of the command) and the state of the data line is set in a second logical state after the normal mode (e.g. active mode) is in use (e.g. after processing of the command and transferring the corresponding indication) (Fig. 2-3 and col. 6, ll. 1-25), as the transferring of the indication would require the change of logical stated in the data line in order to detect the indication.

It would have been obvious to one of ordinary skill in this art, at the time of invention was made to include Khouli's data line and indication signal into Oh-Yang's system for the benefit of determining the command issued by the terminal is correctly executed (Micalizzi, col. 1, ll. 33-35) and enabling a robust power management system, wherein the whole computer system can reduce power consumption (Khouli, col. 2, ll. 1-11 and col. 2, ll. 28-35) to obtain the invention as specified in claim 32.

12. As per claim 43, Oh-Yang, Micalizzi and Khouli teach all the limitations of claim 32 as discussed above, where Oh-Yang further teaches the method comprising wherein said command is used for changing the mode of the card from the dormant mode to the normal mode or from the normal mode to the dormant mode, said command comprises at least one bit, said bit indicates whether the mode change is from the dormant mode to the normal mode or from the normal mode to the dormant mode (Oh-Yang, col. 2, ll. 26-30; col. 3, ll. 54-59; col. 5, ll.15-19; col. 5, ll. 39-43 and col. 5, l. 66 to col. 6, l. 3), as the shift to sleep state command comprising the corresponding bits of command data must differ from the shift to normal command comprising the correspond bits of command data in order to properly distinguish and indicate the command for setting the sleep state flag.

13. Claims 5-6, 12, 38-42 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oh-Yang et al. (US Patent 6,351,820) in view of Khouli et al. (US

Patent 6,308,278) and Micalizzi, Jr. et al. (US Patent 6,434,630) as applied to claims 1, 7, 13 and 16-17 above, and further in view of Lindskog et al. (US Pub.: 2002/0132603).

14. As per claims 5-6 and 12, Oh-Yang, Micalizzi and Khouli teach all the limitations of claims 1 and 7 as discussed above, but Oh-Yang, Micalizzi and Khouli do not teach the method and the system comprising:

wherein after receiving said command to set the normal mode, an acknowledgement about the reception of the command is transmitted from the card to the terminal; and

wherein said terminal used is a wireless terminal provided with mobile station functions.

Lindskog teaches a system and a method comprising:

a wireless network interface card (NIC) coupled to a PC forming a mobile terminal (Fig. 2 and [0003]-[0004]); and

the NIC receiving a request from the PC to transit from a dormant state (i.e. D3) to an active state (i.e. D0) ([0079]); and

an acknowledgement is transferred to the PC in response to the request by the PC to transit from a dormant state (i.e. D3) to an active state (i.e. D0) (claim 17 on page 6).

It would have been obvious to one of ordinary skill in this art, at the time of invention was made to include Lindskog's mobile terminal and acknowledgement into Oh-Yang, Micalizzi and Khouli's interconnecting system and method for the benefit of

providing a power saving concept for the PC in a wireless local area network (WLAN) thus improving the battery lifetime of the PC (Lindskog, [0084]) to obtain the invention as specified in claims 5-6 and 12. The resulting combination of the references teaches the system and the method further comprising:

the card's the acknowledgement associated with the terminal's request to shift to normal state is transferred is transferred to the terminal; and

wherein the card coupled the terminal to form the wireless mobile terminal.

15. As per claims 38-42 and 44, Oh-Yang, Micalizzi and Khouli teach all the limitations of claims 1, 7, 13 and 16-17 as discussed above, where Oh-Yang further teaches the method and the system comprising wherein the command comprises the one bit that indicates whether the mode change is from the dormant mode to the normal mode or from the normal mode to the dormant mode (Oh-Yang, col. 5, ll.15-19; col. 5, ll. 39-43 and col. 5, l. 66 to col. 6, l. 3), as the shift to sleep state command comprising the corresponding bits of command data must differ from the shift to normal command comprising the correspond bits of command data in order to properly indicate the command for setting the sleep state flag.

Oh-Yang, Micalizzi and Khouli do not teach the method and the system comprising the command comprises additional one or more bits further define one or more conditions for mode change.

Lindskog teaches a system and a method comprising command comprises additional one or more bits further define one or more conditions for mode change (Fig.

2 and [0028]; [0057]; [0077]), wherein the additional bits defines the correspond power mode (e.g. D0, D1, D2, D3).

It would have been obvious to one of ordinary skill in this art, at the time of invention was made to include Lindskog's different power modes into Oh-Yang, Micalizzi and Khouli's system and method for the benefit of providing a power saving concept for the PC in a wireless local area network (WLAN) thus improving the battery lifetime of the PC (Lindskog, [0084]) to obtain the invention as specified in claims 38-42 and 44.

**III. CLOSING COMMENTS**

***Conclusion***

**a. STATUS OF CLAIMS IN THE APPLICATION**

The following is a summary of the treatment and status of all claims in the application as recommended by **M.P.E.P. 707.07(i)**:

**a(1) CLAIMS REJECTED IN THE APPLICATION**

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

**b. DIRECTION OF FUTURE CORRESPONDENCES**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chun-Kuan (Mike) Lee whose telephone number is (571) 272-0671. The examiner can normally be reached on 8AM to 5PM.

## IMPORTANT NOTE

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alford Kindred can be reached on (571) 272-4037. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C.K.L./

August 26, 2008

Chun-Kuan (Mike) Lee
Examiner
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/Alford W. Kindred/

Supervisory Patent Examiner, Art Unit 2181